FTT/Malnutrition Pathway

Evidence Based Outcome Center

INCLUSION CRITERIA

All patients with a concern for Malnutrition will be evaluated by Attending Pediatrician for **inclusion** under this guideline:

- Child <24 months old, and
- No underlying disorder (GI, metabolic, endocrine, genetic, prematurity) which is currently *untreated,* and
- Patient *cannot* be managed as an outpatient (medically unstable, moderate or severe dehydration *or* malnutrition*, suspected abuse/neglect, concerns for parent-child interaction, risk for loss of follow up)
- Friday admission avoided if possible

Primary Team:

- Admit using *Failure to Thrive Order Set*
- Detailed history & PE including home feeding regimen
- Obtain and evaluate medical records & growth charts from PCP
- Obtain labs *only* where clinically indicated
- Classify degree of malnutrition for treatment and coding purposes

Multidisciplinary Approach to determine nutritional status and needs:

- *Dietician consult +/- Lactation* (if breast fed)
- *Nursing* observation of at least one feed per day (including formula preparation using powder, caregiver interaction, feeding tolerance)
- *Social Work consult* for full psychosocial assessment

***Severe Malnutrition Criteria:**

Single data point:
Wt for Length, Length or BMI z-score ≤3

Multi data point (2or+):
Wt gain velocity <25% of norm for age
Decrease in Wt for L or BMI z-score of ≥3
≤25% est Energy/protein needs for at least 2 wks
Both fat loss and muscle wasting seen

Severe malnutrition: Use modified WHO feeding protocol per Dietary guideline to prevent refeeding syndrome

Consider **early** consultation:

- *OT consult* if concerns about feeding technique and/or oral-motor function
- *ST consult* if concerns about swallowing
- *CARE team consult* if concerns for abuse, neglect, or follow-up compliance

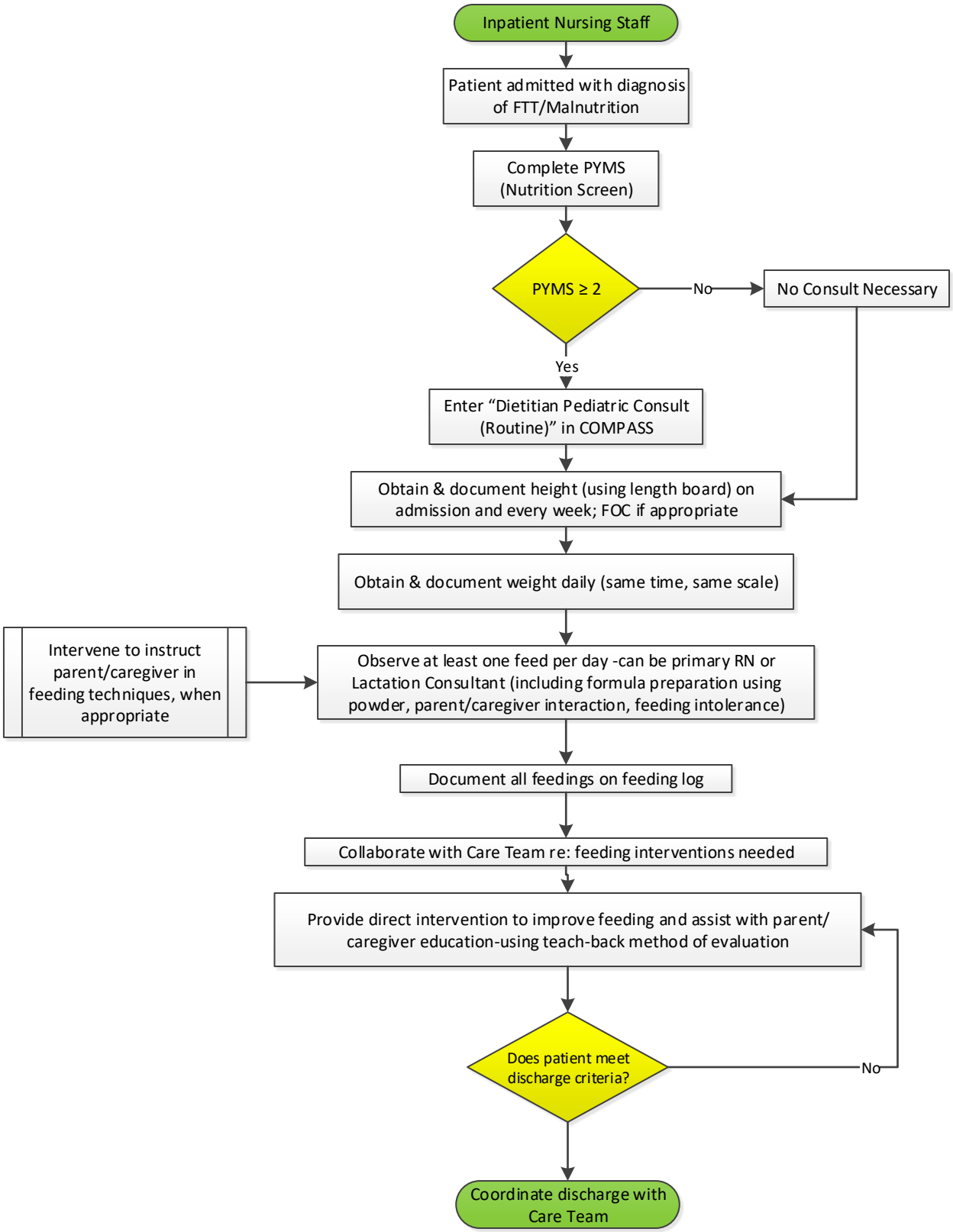
Discharge Criteria:

- Appropriate intake with weight gain over ≥ 3 days without assistance of IVF or TPN.
- Social concerns addressed including caregiver availability and knowledge.
- Arrangements made for obtaining formula after discharge and providing enough formula until WIC appt.
- Written instructions/visual aid for all feeding expectations provided to caregivers.
- Follow up appointments established (PCP, +/- ECI, +/- CARE clinic, +/- WIC) including visit and weight check frequency sent to PCP/CARE.
- Consider multidisciplinary team conference with family +/- signed care contract.

Peditools.org can be used to plot growth parameters for all patients and obtain accurate Z-scores.
WHO Child Growth Standards

FTT/Malnutrition Inpatient Nursing Pathway

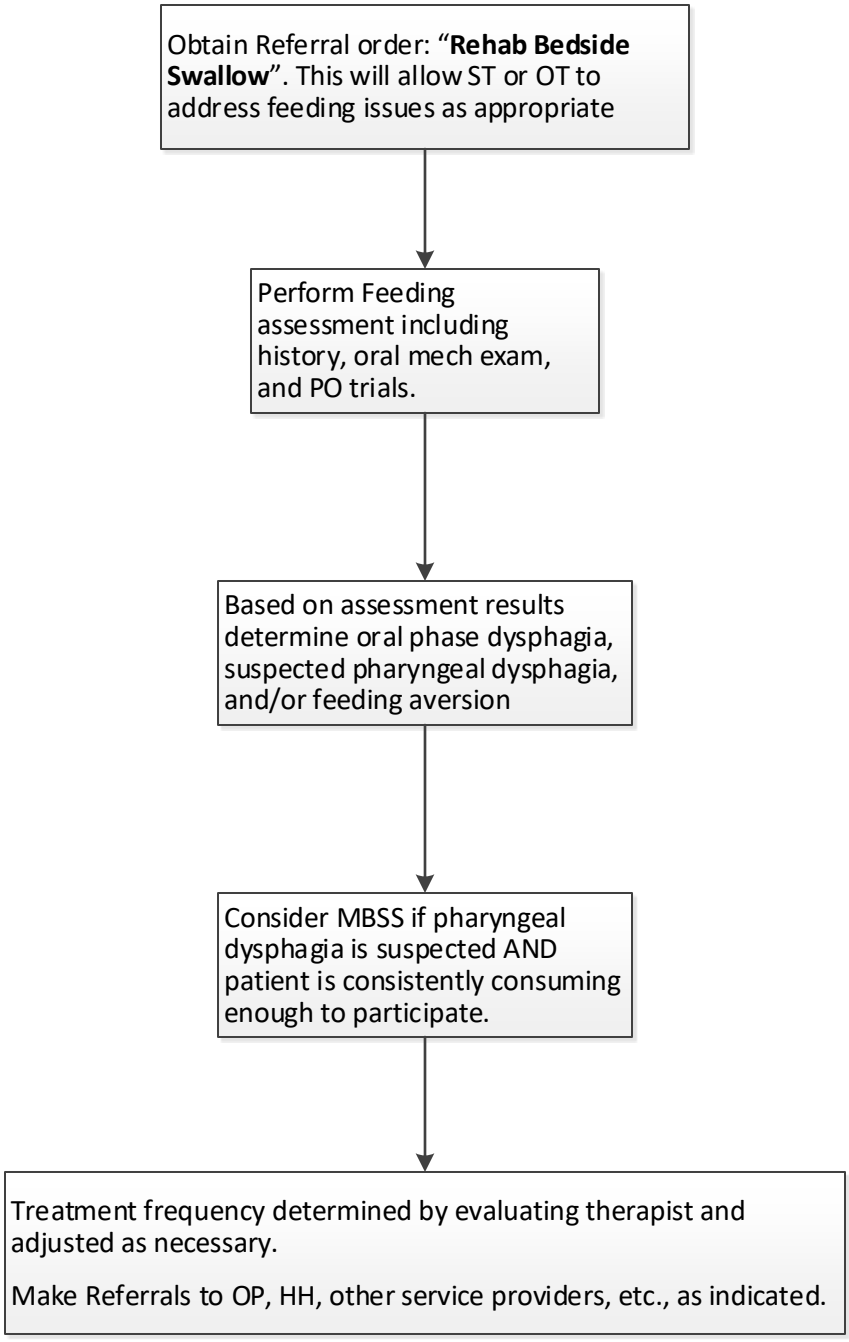
Evidence Based Outcome Center



- Household/family make-up
- All known caregivers for patient (including their age, availability, feeding responsibilities, work schedules, etc.) and their availability for inpatient feedings
- Childcare setting and schedule, food provided and consumed in that setting
- PCP and any specialists
- Employment/insurance/state assistance such as WIC and SNAP
- Any concrete needs not currently being addressed (transportation, housing, food, childcare, etc.)
- Assessment of any learning differences or literacy concerns for the parent (including vision or hearing needs) and any unusual health beliefs
- Assessment of any other special needs of the parent (healthcare needs, current medications that might be pertinent)
- Other psychosocial risk factors: PPD and other MH history, household conflict or DV/IPV, previous CPS or legal involvement, substance abuse issues, support system, other environmental stressors, any concerns for parental knowledge of patient's condition

- General feeding routine, to include: type of formula, how it's mixed, how often given (including at night), and if there are any challenges with *any* of this (waking the patient up, parent waking up themselves, taking feeding cues from patient, etc.).
- Other info about patient's daily routine (sleeping arrangements, sleep schedules, etc.)
- Assessment of patient/caregiver interactions/attachment

- Consider need for 24 room-in if caregiver(s) not available for majority of inpatient feeds and/or for knowledge concerns
- Consider need for MDT conference with family and/or family to sign written plan of care contract prior to hospital discharge


Obtain Referral order: "**Rehab Bedside Swallow**". This will allow ST or OT to address feeding issues as appropriate
Perform Feeding assessment including history, oral mech exam, and PO trials.
Based on assessment results determine oral phase dysphagia, suspected pharyngeal dysphagia, and/or feeding aversion
Consider MBSS if pharyngeal dysphagia is suspected AND patient is consistently consuming enough to participate.
Treatment frequency determined by evaluating therapist and adjusted as necessary.
Make Referrals to OP, HH, other service providers, etc., as indicated.

Executive Summary

Approved by the Pediatric Evidence-Based Outcomes Center Team

Revision History
Original Date Approved: July 2020
Next Review Date: July 2024

Failure to Thrive / Malnutrition EBOC Team:
Marion Forbes, MD
Juliana Vaughan, MD
Marissa Izaguire, MD
Kris Chang, MD
Andrew Wang, MD
Virginia Barrack, MD
Michael Svoboda, MSN, CPNP
Marc Carrion, APN
Heather Vandiest, MPH, LCSW
Petra Navarro, LMSW
Megan Barron, MS, RD, CSP, LD
Becky Toth, MSN, RN, CNS, CPHQ
Jonathan Forfa
Frank James, MBA
Carmen Garudo, PM

EBOC Committee:
Lynn Thoreson, DO
Sarmistha Hauger, MD
Terry Stanley, DNP
Sujit Iyer, MD
Tory Meyer, MD
Nilda Garcia, MD
Meena Iyer, MD

Recommendations

Practice recommendations were directed by the existing evidence and consensus amongst the content experts. Patient and family preferences were included when possible.

Approval Process

EBOC guidelines are reviewed by DCMC content experts, the EBOC committee, and are subject to a hospital wide review prior to implementation. Recommendations are reviewed and adjusted based on local expertise.